

# PHARMACOLOGY



# Objectives

- Discuss all medications on Transition Team drug formulary.
- Discuss generic versus trade names.
- Discuss category, indications, contraindications, dosing, maximum doses, precautions, and side effects/adverse reactions of each drug on the formulary.

# Ibuprofen (Motrin)

- Description: Nonsteroidal anti-inflammatory drug
- Indications: Anti-inflammatory, analgesia, anti-pyretic
- Dosage: 800 mg po tid with food.
- Maximum daily dose (24 hours): 3,200 mg
- Contraindications: Aspirin allergy, ulcers
- Precautions: Prior to surgery, GI bleeding

# Ketorolac (Toradol)

- Description: NSAID
- Indications: Moderately severe pain
- Dosage: 30 mg IVP/60mg IM
- Maximum daily dose (24 hours): 120 mg, no longer than 5 days
- Contraindications: Aspirin allergy, peptic ulcer, GI bleed, prior to surgery
- Adverse reactions- GI pain, dyspepsia

# Albuterol (Proventil)

- Description: Bronchodilator
- Indications: Bronchospasms, bronchitis
- Dosage: 2 puffs q4-6h prn
- Side effects-tremors, nervousness, tachycardia, and dizziness are common with repeated usage.
- **If severe Bronchospasms continue treatment despite mild tachycardia**

# Benzonatate (Tessalon Perles)

- Description: Antitussive
- Indications: Symptomatic relief of cough
- Dosage: 100-200 mg tid, swallow whole-do not chew
- Maximum daily dose (24 hours): 600 mg
- Contraindications: hypersensitivity
- Precautions: Adverse reactions-dizziness, pruritus, sedation

# Pseudoephedrine HCL (Sudafed)

- Description: Decongestant
- Indications: Nasal congestion
- Dosage: 30-60 mg po q4-6 hours.
- Maximum daily dose (24 hours): 240 mg
- Contraindications: Hypertension, CAD,
- Side effects-restlessness, dry mouth, tachycardia, nervousness, stimulant
- Considerations: Drug may act as a stimulant. Avoid taking 2 hours of bedtime.

# Loratadine (Claritin)

- Description: Antihistamine
- Indications: Idiopathic chronic urticaria, seasonal rhinitis
- Dosage: 10 mg po qd
- Contraindications: Asthma attacks
- Precautions: Increased intraocular pressure
- Adverse reactions-possible sedation (sold as a non-drowsy antihistamine)



# Diphenhydramine HCL (Benadryl)

- Description: Antihistamine
- Indications: Urticaria, motion sickness, anaphylaxis as an adjunct to epinephrine
- Dosage: 25-50mg po every 4 to 6 hours
- Maximum daily dose (24 hours): 400 mg
- Contraindications: Acute asthma, glaucoma
- Precautions: Increased IOP, seizure disorder

# Calcium Carbonate (Mylanta)

- Description: Antacid
- Indications: Dyspepsia, calcium supplement
- Dosage: 1-3g po q2h prn
- Maximum daily dose (24 hours): 8 g
- Contraindications: Hypercalcemia
- Precautions: Side effects-Constipation, flatulence
- Considerations: Acid rebound occurs after repeated use for 1-2 weeks

# Ranitidine (Zantac)

- Description: Histamine H<sub>2</sub> receptor antagonist
- Indications: Ulcers, gastroesophageal reflux disease (GERD)
- Dosage: 150 mg po bid or 300 mg hs
- Maximum daily dose (24 hours): 6 g
- Precautions: Renal impairment: reduce dose, hepatic dysfunction

# Loperamide (Imodium)

- Description: Antidiarrhetic
- Indications: Acute nonspecific diarrhea
- Dosage: 4mg po, then 2mg po after each loose stool
- Maximum daily dose (24 hours): 16 mg
- Contraindications: Acute diarrhea due to invasive organism (Salmonella, E. Coli)
- Precautions: Dehydration, Side effects-constipation, dry mouth

# Promethazine (Phenergan)

- Description: Antiemetic
- Indications: N/V, motion sickness
- Dosage: 25mg po/IM or slow IV push over 1-2 minutes q4-6h prn
- Contraindications: Asthma attack
- Precautions: Sedation, disorientation, dizziness

# Bacitracin

- Description: Topical antibiotic
- Indications: Superficial infections of the skin
- Dosage: Apply thin layer bid
- Contraindication: Hypersensitivity
- Considerations: May cause super infection if used more than 1 week, allergic dermatitis.

# Erythromycin Ophthalmic Ointment

- Description: Topical antibiotic
- Indications: Superficial infections of the eye
- Dosage: Apply ½ inch ribbon of ointment in the affected eye q4h
- Considerations: Do not use >5 days, do not let the applicator tip touch the eye

# Silver Sulfadiazine (Silvadene)

- Description: Topical antimicrobial
- Indications: Adjunct in the prevention and treatment of wound sepsis with 2<sup>nd</sup> and 3<sup>rd</sup> degree burns.
- Dosage: Apply a thickness of approximately 1/16 inch qd-bid
- Precautions: Impaired renal or liver function.



# Hydrocortisone 1% cream

- Description: Topical corticosteroid
- Indications: Dermatitis, eczema, pruritus
- Dosage: Apply thin layer AAA bid, taper
- Precautions: Secondary infection, avoid applying near eyes or mucous membranes

# Ceftriaxone Sodium (Rocephin)

- Description: Cephalosporin broad-spectrum antibiotic
- Indications: Otitis media, respiratory infections, meningitis, UTI's, skin infections, gonorrhea
- Dosage: 1-2 g IM/IV qd or in 2 equal doses
- Maximum daily dose (24 hours): 4 g
- Contraindications: Penicillin allergy

# Levofloxacin (Levaquin)

- Description: Broad-spectrum antibiotic
- Indications: sinusitis, bronchitis, skin infections, UTI, prostatitis, pyelonephritis.
- Dosage: 500 mg po qd
- Contraindications: Diabetes
- Precautions: Tendon pain, inflammation or rupture; Adverse reactions-GI upset, agitation, photosensitivity

# Undecylenic Zinc powder (Foot powder)

- Description: Antifungal powder
- Indications: Tinea pedis
- Dosage: Apply light dust to feet bid-tid prn

# Terbinafine HCL (Lamisil)

- Description: Topical antifungal
- Indications: Tinea pedis, tinea corporis, tinea cruris
- Dosage: Apply small amount to affected area bid
- Precautions: Avoid mucous membranes, scalp, nails, and use of occlusive dressings;  
Side Effect-dryness, burning, pruritus

# Lidocaine HCL (Xylocaine)

- Description: Local anesthetic
- Indications: Local anesthesia, peripheral nerve block
- Dosage: 3mg/kg/dose
- Contraindications: Liver disease

# **Tetracaine HCL 0.5% Solution**

- Description: Topical anesthetic
- Indications: Surface anesthesia of the eye
- Dosage: 1 to 2gtts in affected eye
- Precautions: Prolonged use can cause ocular degeneration.

# Acetaminophen (Tylenol)

- Description: Analgesia
- Indications: Antipyretic, analgesic
- Dosage: 325-650 mg po q4-6h prn
- Maximum daily dose (24 hours): 4g
- Contraindications: 3 or more drinks of alcohol daily
- Precautions: Hepatic dysfunction



# Morphine Sulfate Autoinjector

- Description: Opioid analgesic
- Indications: Severe pain, MI
- Dosage: 10 mg IM every 4h
- Contraindications: increased ICP
- Precautions: Hemorrhage, respiratory distress, asthma, bradypnea
- Considerations: Narcan must be available, auto-injector is not meant for repeat doses

# Oxycodone HCL / Acetaminophen (Percocet)

- Description: Opioid analgesic
- Indications: Moderate to severe pain
- Dosage: 5 mg oxycodone/325 mg acetaminophen: 1 to 2 tabs po q6h
- Contraindications: GI obstruction, head injury, Hepatic dysfunction
- Side effects: dizziness, sedation, nausea, constipation, urinary retention, rash  
Overdosage: respiratory depression, liver damage,
- Narcan for overdose

# Naloxone (Narcan)

- Description: Narcotic antagonist for opiates
- Indications: Narcotic agonist
- Dosage: 2 mg IV push, repeat at 2-3 minute intervals
- Maximum total dose: 10 mg
- Contraindications: Respiratory depression not due to opiates
- Precautions: May precipitate withdrawal symptoms in narcotic dependency

# **6% Hetastarch in Lactated Electrolyte Inj. (Hexextend)**

- Description: Plasma volume expander
- Indications: Hypovolemia
- Dosage: 500-1000 ml IV
- Contraindications: Renal failure
- Precautions: Liver disease, pulmonary edema

# Epinephrine Auto-Injector Epi-Pen)

- Description: Bronchodilator
- Indications: Anaphylaxis, allergic reactions, bronchospasm
- Dosage: 0.3ml of 1:1000 USP intramuscular injection (anterolateral thigh) repeated every 5-15 minutes prn
- Contraindications: Non-anaphylactic shock
- Precautions: Do not inject into the fingers, toes, ears, nose, genitalia, or buttocks.

# Questions

